



4910-13

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Docket No. FAA-2017-0653; Airspace Docket No. 17-AWA-2]

RIN 2120-AA66

Amendment of Class B Airspace; San Francisco, CA

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This action modifies the San Francisco, CA, Class B airspace area to contain aircraft conducting instrument flight rules (IFR) instrument approach procedures to San Francisco International Airport (SFO), San Francisco, CA. The FAA is taking this action to improve the flow of air traffic, enhance safety, and reduce the potential for midair collision in the SFO Class B airspace area while accommodating the concerns of airspace users. Further, this effort supports the FAA's national airspace redesign goal of optimizing terminal and enroute airspace to reduce aircraft delays and improve system capacity.

DATES: Effective date 0901 UTC, August 16, 2018. The Director of the FEDERAL REGISTER approves this incorporation by reference action under Title 1, Code of Federal Regulations, part 51, subject to the annual revision of FAA Order 7400.11 and publication of conforming amendments.

ADDRESSES: FAA Order 7400.11B, Airspace Designations and Reporting Points, and subsequent amendments can be viewed online at http://www.faa.gov/air_traffic/publications/.

For further information, you can contact the Airspace Policy Group, Federal Aviation

Administration, 800 Independence Avenue, SW, Washington, DC, 20591; telephone: (202) 267-8783. The Order is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of FAA Order 7400.11B at NARA, call (202) 741-6030, or go to <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

FAA Order 7400.11, Airspace Designations and Reporting Points, is published yearly and effective on September 15.

FOR FURTHER INFORMATION CONTACT: Kenneth Ready, Airspace Policy Group, Office of Airspace Services, Federal Aviation Administration, 800 Independence Avenue, SW, Washington, DC 20591; telephone: (202) 267-8783.

SUPPLEMENTARY INFORMATION:

Authority for this Rulemaking

The FAA's authority to issue rules regarding aviation safety is found in Title 49 of the United States Code. Subtitle I, Section 106 describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the agency's authority. This rulemaking is promulgated under the authority described in Subtitle VII, Part A, Subpart I, Section 40103. Under that section, the FAA is charged with prescribing regulations to assign the use of the airspace necessary to ensure the safety of aircraft and the efficient use of airspace. This regulation is within the scope of that authority as it modifies the San Francisco, CA, Class B airspace area to improve the flow of air traffic and enhance safety within the National Airspace System (NAS).

Availability and Summary of Documents for Incorporation by Reference

This document amends FAA Order 7400.11B, Airspace Designations and Reporting Points, dated August 3, 2017, and effective September 15, 2017. FAA Order 7400.11B is

publicly available as listed in the ADDRESSES section of this document. FAA Order 7400.11B lists Class A, B, C, D, and E airspace areas, air traffic service routes, and reporting points.

History

The FAA published a notice of proposed rulemaking (NPRM) in the FEDERAL REGISTER for Docket No. FAA-2017-0653 (83 FR 2747; January 19, 2018). The NPRM proposed to modify the San Francisco, CA, Class B airspace area. Interested parties were invited to participate in this rulemaking effort by submitting written comments on the proposal. Ten written comments were received in response to the NPRM. All comments received were considered before making a determination on the final rule.

Class B airspace designations are published in paragraph 3000 of FAA Order 7400.11B, dated August 3, 2017, and effective September 15, 2017, which is incorporated by reference in 14 CFR 71.1. The Class B airspace designations listed in this document will be subsequently published in the Order.

Discussion of Comments

In the response to the NPRM, several individuals and three aviation groups: Airline Pilots Association, International (ALPA), Aircraft Owners and Pilot Association (AOPA), and Experimental Aircraft Association (EAA) submitted comments expressing support for the proposed design of the San Francisco Class B and provided substantive comments and recommendations to further the design. The comments were grouped in the following:

- Glider Operations
- Areas C and D
- Area B
- Area F

- Ceiling of class B at 10,000 feet
- ADS-B requirement

Having considered the issues and recommendations provided by the commenters, the FAA offers the following responses.

Glider Operations

One individual commenter stated glider operations are just outside of the current lateral limits of the airspace and expanding the airspace may cause issues for the operations that exist in those locations.

Prior to publishing the NPRM, the FAA formed an ad-hoc committee and held informal airspace meetings to present a pre-rulemaking outline of the revised Class B airspace. At that time, representatives from the glider community expressed concern that the changes to the airspace would have a negative impact on glider activity near Mount Diablo. Based on this input, the proposal put forth in the NPRM reflected changes to the Class B airspace over Mt. Diablo by eliminating some of the Class B airspace previously suggested during the pre-rulemaking phase and raising the floor in other areas to 7000 feet. The FAA is retaining these changes in the final rule to accommodate glider operations in the Mount Diablo area. In addition, the airspace over Pacifica was raised in the design proposal, accepted during the ad-hoc and thereby accommodating hang gliders.

Areas C and D

Four comments were received regarding the shape and altitudes associated with Area C and Area D. One commenter expressed concern that the boundaries of Areas C and D are very close to one another and stated that general aviation pilots risk unintentionally violating lateral or vertical limits as they try to transition around the airspace. The commenter suggested that the

cutouts exist due to the poor design of three departure procedures and recommended amending the departure procedures to allow for higher floors to the airspace and will enable the incorporation of Area C into Area D.

Areas C and D were not designed to capture the Area Navigation (RNAV) departure procedures (DPs). These areas were designed to contain the instrument approaches to Runway (RWY) 10. Track data shows that the SNTNA DP, GNNRR DP and WESLA DPs do not enter Area C or D. All of these DPs have an initial climb gradient of at least 500 feet per nautical mile and standard aircraft performance places them above the C and D areas. The DPs were designed in compliance with the current RNAV DP design criteria in concert with industry and air traffic control standards. They were flown in simulators under varied wind conditions and have been utilized without incident since March 2015.

Three other comments were concerned that lowering the floor of Areas C and D would impede VFR transiting along the coast.

Area C is an arrival extension to Area A and was built to contain RNAV approaches to RWY10. Area D provides a longer arrival extension from the west and also contains the RWY10 arrival approaches and neither can be raised. The RNAV approach to RWY10L crosses NORMM (intermediate fix) which is located just outside of Area D at or above 3,500 feet descending on a 3-degree glide path to cross XATTU (final approach fix) at or above 1,800 feet descending. XATTU is located on the border of Area C and Area A. Area D is needed to contain this descent path. The RNAV approaches to RWY10R cross DOTNE (intermediate fix) at 3,500 feet descending on a 3-degree glide path to cross JULOS (final approach fix) at 1,900 feet descending. DOTNE is just outside of Area D and JULOS is in the center of Area C. Area D is

needed to contain this decent path. Area C is needed to capture the descent through 1,900 feet to 1,600 on the approach.

Area B

Two individual commenters stated lowering Area B from 1500 to 1400 feet will almost certainly lead to inadvertent Class B violations from pilots making a right crosswind departure from KSQL RWY30. Additionally, they indicate that it will put a general aviation pilot at a disadvantage if flying over water.

The FAA concurs and raised the floor of Area B to 1,500 feet.

Area F

Two aviation groups (AOPA and EAA) stated lowering the floor of Area F would reduce the airspace available for aircraft to transit the VFR flyway simultaneously in both directions from San Carlos Airport (SQL) and Palo Alto (PAO) airport. AOPA also indicated the FAA must justify the reduction of the Class B floor, as it does not appear to be aligned with any final approach course. AOPA and EAA both raised concerns for the potential of a mid-air collision due to compression and congestion. One aviation group (ALPA) concurs with the NPRM design, which was suggested by the ad hoc committee.

The FAA policy for airspace design directs that Class B airspace designers have the flexibility to use the configuration that best meets the purposes of reducing mid-air collision potential, assures containment of instrument approaches, and enhances the efficient use of airspace. The floor of the Area F airspace takes into account the visual approaches to the runway, which enhances the efficiency of the airspace.

Published procedures, separation minimum, track data, and local experience were used to determine the required airspace floor in this area. Additionally, SFO arrivals to RWY28 have

two charted visual approaches that are highly used, thereby increasing efficiency to the airport. San Francisco's air traffic control tower and Northern California TRACON (NCT) advertise and issue side-by-side visual approaches approximately 86% of the time. Visual approaches are a critical component of the efficiency of the San Francisco Airport. The arrival rate during visual meteorological conditions (VMC) when using side-by-side visual approaches is 54 arrivals and during instrument meteorological conditions (IMC) it is 36 arrivals. The higher efficiency rate is only possible through the use of visual approaches. While operating at the higher rate the FAA has a requirement to maintain vertical separation between the two visual approach aircraft until visual separation is applied. Aircraft altitudes are stepped down when using visual approaches. Aircraft arriving RWY28L are kept lower than aircraft on RWY28R. This allows the FAA to safely transition to simultaneous ILS approaches quickly if a weather front comes in, which is a common occurrence in the San Francisco Bay area. Additionally, a special flyway was developed to facilitate PAO and SQL airports traffic. The highest minimum vectoring altitude (MVA) on RWY28L final is 2100 feet. NCT uses the airspace to 2100 feet in Area F; however, due to the mid-air collision concerns raised by the aviation group commenters, the floor is being raised to 2300 feet in this final rule.

The floor inside of Area F will be raised to 2,300 feet and VFR aircraft will have adequate maneuvering altitude with this design.

Ceiling of Class B at 10,000 feet

AOPA and EAA requested justification for the establishment of a 10,000-foot ceiling to the Class B airspace. AOPA noted that the 10,000-foot ceiling will require general aviation pilots seeking to transit the Class B airspace to fly at a low altitude (less than 1,600 feet MSL) or a high altitude (over 10,000 feet MSL). AOPA states that the FAA should improve the

opportunity for general aviation aircraft to overfly the coast at cruise altitudes more normally utilized, such as 7,500 and 8,500 feet MSL. AOPA recommended that the Class B areas west of the U.S. coast have a ceiling of 7,000 feet MSL to facilitate general aviation overflight without the requirement to obtain a clearance. One aviation group (ALPA) concurred with the NPRM design stating departure and arrival procedures enter and exit the Class B at higher altitudes.

Generally, the standard design for Class B airspace is from the surface to 10,000 feet MSL. Class B airspace surrounds the nation's busiest airports in terms of airport operations or passenger enplanements. The configuration of each Class B airspace area is individually tailored and is designed to contain all published instrument procedures. The current Class B airspace between 8,000 and 10,000 feet at San Francisco International Airport is used to do much of the vectoring of aircraft to facilitate sequencing and provide for separation on final. The airspace around the Bay Area is very congested and the only airspace available for vectoring that facilitates the sequencing of arrivals and prevents conflict with other arrivals and departures is offshore. Fifty percent of the aircraft on the SERFR from the south are vectored. Aircraft from the east cannot be vectored without conflicting with multiple other arrival and departure routes. There are a significant number of arrivals from the west, northwest, and southwest offshore. The FAA is being asked by the public to perform more vectoring offshore to mitigate aircraft noise. Additionally, new arrival procedures are being developed originating from offshore that will also utilize this airspace. For these reasons, AOPA's recommendation to establish a ceiling of 7,000 feet MSL west of the U.S. coast is not feasible, as it will deteriorate the arrival rate of the SFO airport.

ADSB requirement

One individual commenter stated, because the lateral boundaries of Class B airspace are being expanded, the Mode C veil will be extended as well. The commenter noted that this change will cause financial loss due to the equipment requirements (Mode C transponder/ADS-B Out) associated with this airspace expansion. Additionally, one individual commenter contends the expansion of the Class B airspace will have a negative financial burden to aircraft owners due to Automatic Dependent Surveillance-Broadcast (ADS-B) requirement in 14 CFR 91.225(d)(3)”; stating privately owned aircraft will have to move their aircraft further away from the Class B airspace if they do not equip for ADS-B.

The FAA does not agree with the commenter who states the Mode C Veil will expand with the expansion of the Class B airspace. The Mode C veil was established by an independent 14 Code of Federal Regulation (CFR) rulemaking action under part 91.215 “ATC transponder and altitude reporting equipment and use.” Although the Class B airspace extends beyond 30 miles in certain areas around SFO, the Mode C veil does not extend with the Class B airspace and remains a 30-mile ring around SFO.

The FAA does not agree with the individual commenters that stated expansion beyond 30 miles for the Class B will expand the forthcoming ADS-B equipment mandate. The ADS-B requirement in 14 CFR 91.225 states ADS-B equipment is required in 1) Class B, 2) within 30 miles and up to 10,000 feet MSL of a Class B, 3) above the ceiling and within the lateral boundaries of a Class B upward to 10,000 feet MSL. In the three locations where SFO’s Class B extends beyond 30 miles all altitudes for those areas are 8,000 feet to 10,000 feet MSL. Considering these areas are Class B (from 8,000 to 10,000 feet MSL) they require ADS-B equipment. There is no provision stating you must equip with ADS-B below the floor and within

the boundaries of a Class B outside the 30-mile ring. Hence, aircraft that choose not to equip with the ADS-B mandate in the year 2020, will not have to extend beyond 30 miles to other airports because the SFO Class B expanded beyond 30 miles at higher altitudes.

Differences From the NPRM

In the NPRM, the FAA proposed lower floor altitudes for Areas B and F but have raised these altitudes in response to comments received to the NPRM. Initially, Area B was proposed at 1,400 feet MSL and has been changed to 1,500 feet MSL. Area F was proposed at 2,100 feet MSL and has been changed to 2,300 feet MSL.

Additionally, a charting error is being corrected to Area C. The initial geographic lat/long coordinate (lat. 37°41'25" N., long. 122°30'23" W.) in Area C was duplicated at the end of the description in the NPRM. The FAA is removing the unnecessary secondary geographic lat/long coordinate to correct the charting error.

The Rule

The FAA is amending Title 14 of the Code of Federal Regulations (14 CFR) part 71 to modify the SFO Class B airspace area. This action (depicted on the attached graphic) moves away from the three concentric circle (upside down wedding cake) design configuration and is redrawn based on arrival and departure routes into and out of SFO. Using this design approach allows the FAA to minimize the Class B airspace necessary to contain instrument procedures within Class B airspace for aircraft arriving and departing SFO and to re-designate current Class B airspace as Class E or Class G to make it available for aircraft circumnavigating the Class B airspace area. Additionally, the proposed modifications would better segregate IFR aircraft

arriving/departing SFO and VFR aircraft operating in the vicinity of the SFO Class B airspace area. The modifications to the SFO Class B airspace area are discussed below.

Area A. Area A is amended as proposed by moving the southern boundary northward to accommodate local hang glide operations and incorporating minor modifications to the northeast boundary by using geographic coordinates to define the surface area. Area A extends upward from the surface, to and including 10,000 feet MSL.

Area B. Area B is amended by incorporating portions of existing Area B and Area F and establishing a floor at 1,500 feet MSL. The existing Area B southern boundary is moved northward and eastern boundary is moved westward, and a small portion of existing Area F is added. The floor of the existing Area F portion is lowered from 2,100 feet MSL to 1,500 feet MSL. Area B extends upward from 1,500 feet MSL, to and including 10,000 feet MSL.

Area C. A new Area C is established, as proposed in the NPRM, west of SFO beyond Area A, by incorporating small portions of existing Area F and Area I and establishing a floor at 1,600 feet MSL. The floor of the existing Area F portion is lowered from 2,100 feet MSL to 1,600 feet MSL and the floor of the existing Area I portion is raised from 1,500 feet MSL to 1,600 feet MSL. Area C extends upward from 1,600 feet MSL, to and including 10,000 feet MSL.

Area D. A new Area D is established, as proposed in the NPRM, west of SFO beyond the new Area C, by incorporating small portions of existing Area F, Area G, and Area I. The floor of the existing Area F portion is retained at 2,100 feet MSL, the floor of the existing Area G portion is lowered from 3,000 feet MSL to 2,100 feet MSL, and the floor of the existing Area I portion is raised from 1,500 feet MSL to 2,100 feet MSL. Area D extends upward from 2,100 feet MSL, to and including 10,000 feet MSL.

Area E. A new Area E is established, as proposed in the NPRM, northwest of SFO extending clockwise to the east of SFO beyond Area A, by incorporating a sliver of existing Area A and small portions of existing Area F and Area G. The floor of the existing Area A portion is raised from the surface to 2,100 feet MSL, the floor of the existing Area F portion is retained at 2,100 feet MSL, and the floor of the existing Area G portion is lowered from 3,000 feet MSL to 2,100 feet MSL. Area E extends upward from 2,100 feet MSL, to and including 10,000 feet MSL.

Area F. A new Area F is established, located southeast of SFO beyond the new Area B, by incorporating small portions of existing Area B, Area C, Area F, and Area G. The floor of the existing Area B portion is raised from 1,500 feet MSL to 2,300 feet MSL, the floor of the existing Area C portion is lowered from 2,500 feet MSL to 2,300 feet MSL and the existing Area G portion is lowered from 3,000 feet MSL to 2,300 feet MSL, and the floor of the existing Area F portion is retained at 2,300 feet MSL. Area F extends upward from 2,300 feet MSL, to and including 10,000 feet MSL.

Area G. A new Area G is established, as proposed in the NPRM, northwest of SFO beyond the new Area D and Area E, by incorporating small portions of existing Area A, Area F, Area G, Area H, and Area I. The floor of the existing Area A portion is raised from the surface to 3,000 feet MSL, the existing Area F portion is raised from 2,100 feet MSL to 3,000 feet MSL, and the existing Area I portion is raised from 1,500 feet MSL to 3,000 feet MSL; the floor of the existing Area G portion is retained at 3,000 feet MSL; and the floor of the existing Area H portion is lowered from 4,000 feet MSL to 3,000 feet MSL. Additionally, a sliver of Class B airspace is established beyond the existing Area H external SFO Class B airspace boundary with

a floor of 3,000 feet MSL. Area G extends upward from 3,000 feet MSL, to and including 10,000 feet MSL.

Area H. A new Area H is established, as proposed in the NPRM, southeast of SFO beyond the new Area E and Area F, by incorporating small portions of existing Area A, Area B, Area C, Area D, Area F, and Area G. The floor of the existing Area A portion is raised from the surface to 3,000 feet MSL, the existing Area B portion is raised from 1,500 feet MSL to 3,000 feet MSL, the existing Area C portion is raised from 2,500 feet MSL to 3,000 feet MSL, and the existing Area F portion is raised from 2,100 feet MSL to 3,000 feet MSL; the floor of the existing Area G portion is retained at 3,000 feet MSL; and the floor of the existing Area D portion is lowered from 4,000 feet MSL to 3,000 feet MSL. Area H extends upward from 3,000 feet MSL, to and including 10,000 feet MSL.

Area I. A new Area I is established, as proposed in the NPRM, north of SFO extending clockwise to the west of SFO beyond the new Area E, Area G, and Area H, by incorporating small portions of the existing Area A, Area C, Area D, Area E, Area F, Area G, Area H, Area I, and Area K. The floor of the existing Area A portion is raised from the surface to 4,000 feet MSL, the existing Area C portion is raised from 2,500 feet MSL to 4,000 feet MSL, the existing Area F portion is raised from 2,100 feet MSL to 4,000 feet MSL, the existing Area G portion is raised from 3,000 feet MSL to 4,000 feet MSL, and the existing Area I portion is raised from 1,500 feet MSL to 4,000 feet MSL; the floor of the existing Area D and Area H portions are retained at 4,000 feet MSL; and the floor of the existing Area E portions are lowered from 6,000 feet MSL to 4,000 feet MSL and the existing Area K portion is lowered from 5,000 feet MSL to 4,000 feet MSL. Additionally, a small portion of Class B airspace is established beyond the

existing Area E and Area H external SFO Class B airspace boundaries with a floor of 4,000 feet MSL. Area I extends upward from 4,000 feet MSL, to and including 10,000 feet MSL.

Area J. A new Area J is established, as proposed in the NPRM, north of SFO beyond the new Area G and Area I, by incorporating small portions of the existing Area D, Area E, Area G, and Area H. The floor of the existing Area G portion is raised from 3,000 feet MSL to 5,000 feet MSL and the existing Area D and Area H portions are raised from 4,000 feet MSL to 5,000 feet MSL, and the floor of the existing Area E portion is lowered from 6,000 feet MSL to 5,000 feet MSL. Additionally, a small portion of Class B airspace is established beyond the existing Area D, Area E, and Area G external SFO Class B airspace boundaries with a floor of 5,000 feet MSL. Area J extends upward from 5,000 feet MSL, to and including 10,000 feet MSL.

Area K. A new Area K is established, as proposed in the NPRM, north of SFO beyond the new Area I and Area L (described below), by incorporating small portions of the existing Area D and Area E. The floor of the existing Area D portion is raised from 4,000 feet MSL to 5,000 feet MSL and the floor of the existing Area E portion is retained at 6,000 feet MSL. Additionally, a sliver of Class B airspace is established beyond the existing Area E external SFO Class B boundary with a floor of 6,000 feet MSL. Area K extends upward from 6,000 feet MSL, to and including 10,000 feet MSL.

Area L. A new area is established, as proposed in the NPRM, northeast of SFO beyond the new Area I, by incorporating small portions of the existing Area D and Area E. The floor of the existing Area D portion is raised from 4,000 feet MSL to 5,000 feet MSL and the floor of the existing Area E portion is lowered from 6,000 feet MSL to 5,000 feet MSL. Area L extends upward from 5,000 feet MSL, to and including 10,000 feet MSL.

Area M. A new area is established, as proposed in the NPRM, south of SFO beyond the new Area I, by incorporating portions of the existing Area D, Area E, Area G, Area J, and Area K. The floor of the existing Area D portion is raised from 4,000 feet MSL to 6,000 feet MSL, the existing Area G portion is raised from 3,000 feet MSL to 6,000 feet MSL, and the existing Area K portion is raised from 5,000 feet MSL to 6,000 feet MSL; the floor of the existing Area E portion is retained at 6,000 feet MSL; and the floor of the existing Area J is lowered from 8,000 feet MSL to 6,000 feet MSL. Additionally, a portion of Class B airspace is established beyond the existing Area E and Area J external SFO Class B boundaries with a floor of 6,000 feet MSL. Area M extends upward from 6,000 feet MSL, to and including 10,000 feet MSL.

Area N. A new area is established, as proposed in the NPRM, south-southeast of SFO beyond the new Area M, by incorporating small portions of the existing Area E and Area J. The floor of the existing Area E portion is raised from 6,000 feet MSL to 8,000 feet MSL and the floor of the existing Area J portion is retained at 8,000 feet MSL. Additionally, a portion of Class B airspace is established beyond the existing Area J external SFO Class B boundary with a floor of 8,000 feet MSL. Area N extends upward from 8,000 feet MSL, to and including 10,000 feet MSL, to accommodate VFR aircraft operating in higher terrain below the Class B airspace.

Area O. A new area is established, as proposed in the NPRM, northeast of SFO beyond the new Area L, within a portion of the existing Area E. The floor of the existing Area E portion is raised from 6,000 feet MSL to 7,000 feet MSL. Additionally, a sliver of Class B airspace is established beyond the current Area E external SFO Class B boundary with a floor of 7,000 feet MSL. Area O extends upward from 7,000 feet MSL, to and including 10,000 feet MSL, to accommodate frequent use by VFR traffic operating in higher terrain (Mount Diablo) below the Class B airspace.

Area P. A new area is established, as proposed in the NPRM, east-southeast of SFO beyond the new Area M, within a portion of the existing Area J. The floor of the existing Area J portion is lowered from 8,000 feet MSL to 7,000 feet MSL. Additionally, a small portion of Class B airspace is established beyond the existing Area J external SFO Class B boundary with a floor of 7,000 feet MSL. Area P extends upward from 7,000 feet MSL, to and including 10,000 feet MSL.

Area Q. A new area is established, as proposed in the NPRM, east of SFO beyond the new Area I and Area P, within a portion of the existing Area E and Area J. The floor of the existing Area E portion is raised from 6,000 feet MSL to 8,000 feet MSL and the floor of the existing Area J portion is retained at 8,000 feet MSL. Additionally, a portion of Class B airspace is established beyond the existing Area E and Area J external SFO Class B boundaries with a floor of 8,000 feet MSL. Area Q extends upward from 8,000 feet MSL, to and including 10,000 feet MSL, to capture delay vectoring for runway 10 and 19 IFR arrival aircraft.

Regulatory Notices and Analyses

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore: (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under Department of Transportation (DOT) Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. Since this is a routine matter that only affects air traffic procedures and air navigation, it is certified that this rule, when promulgated, does not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Environmental Review

The FAA has determined that this action of redesigning Class B airspace associated with the KSFO for the purpose of reducing the potential for midair collisions in airspace around airports with high-density air traffic, qualifies for categorical exclusion under the National Environmental Policy Act and its agency-specific implementing regulations in FAA Order 1050.1F, “Environmental Impacts: Policies and Procedures” regarding categorical exclusions for procedural actions at paragraph 5-6.5.a, which categorically excludes from full environmental impact review rulemaking actions that designate or modify classes of airspace areas, airways, routes, and reporting points. This airspace action is an editorial change only and is not expected to result in any potentially significant environmental impacts. In accordance with FAA Order 1050.1F, paragraph 5-2 regarding Extraordinary Circumstances, this action has been reviewed for factors and circumstances in which a normally categorically excluded action may have a significant environmental impact requiring further analysis, and it is determined that no extraordinary circumstances exist that warrant preparation of an environmental assessment.

Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)) requires that the FAA consider the impact of paperwork and other information collection burdens imposed on the public. We have determined that there is no new information collection requirement associated with this rule.

Regulatory Evaluation

Changes to Federal regulations must undergo several economic analyses. First, Executive Order 12866 and Executive Order 13563 direct that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended

regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 (Pub. L. 96–354) requires agencies to analyze the economic impact of regulatory changes on small entities. Third, the Trade Agreements Act (Pub. L. 96–39) prohibits agencies from setting standards that create unnecessary obstacles to the foreign commerce of the United States. In developing U.S. standards, the Trade Act requires agencies to consider international standards and, where appropriate, that they be the basis of U.S. standards. Fourth, the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4) requires agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure by State, local, or tribal governments, in the aggregate, or by the private sector, of \$100 million or more annually (adjusted for inflation with base year of 1995).

Department of Transportation Order DOT 2100.5 prescribes policies and procedures for simplification, analysis, and review of regulations. If the expected cost impact is so minimal that a proposed or final rule does not warrant a full evaluation, this order permits that a statement to that effect and the basis for it to be included in the preamble if a full regulatory evaluation of the cost and benefits is not prepared. Such a determination has been made for this final rule. The reasoning for this determination follows.

It is appropriate to redesign SFO Class B airspace for reasons described earlier including the availability of new procedures such as the use of “Optimized Profile Descents,” advances in technology; migration to GPS from ground based navigation facilities and updated charting criteria.

This regulation will modify the San Francisco, CA, (SFO) Class B airspace area to improve the flow of air traffic, enhance safety and reduce the potential for midair collision in the SFO Class B airspace area while accommodating the concerns of airspace users. This effort

supports the FAA's national airspace redesign goal of optimizing terminal and enroute airspace to reduce aircraft delays and improve system capacity.

The Class B airspace redesign may enhance opportunities for more fuel-efficient descent profiles.

Further, the SFO Class B airspace redesign will enhance safety by containing IFR traffic arriving and departing SFO within the confines of Class B airspace and will better segregate IFR and VFR aircraft.

Finally, the regulation will return current Class B airspace that is not being used for SFO airport arrivals or departures to the NAS. Because it will modify SFO Class B airspace to take advantage of more fuel efficient approaches and optimize terminal and enroute airspace to reduce delays and improve system capacity, the rule is expected to be a minimal cost rule with the potential to result in minor cost savings.

FAA has, therefore, determined that this final rule is not a "significant regulatory action" as defined in section 3(f) of Executive Order 12866, and is not "significant" as defined in DOT's Regulatory Policies and Procedures.

Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (Pub. L. 96-354) (RFA) establishes "as a principle of regulatory issuance that agencies shall endeavor, consistent with the objectives of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the businesses, organizations, and governmental jurisdictions subject to regulation." To achieve this principle, agencies are required to solicit and consider flexible regulatory proposals and to explain the rationale for their actions to assure that such proposals are given serious consideration. The RFA covers a wide-range of small entities, including small businesses, not-

for profit organizations, and small governmental jurisdictions. Agencies must perform a review to determine whether a rule will have a significant economic impact on a substantial number of small entities. If the agency determines that it will, the agency must prepare a regulatory flexibility analysis as described in the RFA. However, if an agency determines that a rule is not expected to have a significant economic impact on a substantial number of small entities, section 605(b) of the RFA provides that the head of the agency may so certify and a regulatory flexibility analysis is not required. The certification must include a statement providing the factual basis for this determination, and the reasoning should be clear.

The redesign of the SFO Class B airspace will not affect a substantial number of small entities because the redesign does not alter or amend any existing flight path at SFO. Any change to an existing flight path will be achieved through a separate action. Therefore, the expected outcome, if any, will be a minimal economic impact on small entities affected by this rulemaking action.

If an agency determines that a rulemaking will not result in a significant economic impact on a substantial number of small entities, the head of the agency may so certify under section 605(b) of the RFA. Therefore, as provided in section 605(b), the head of the FAA certifies that this rulemaking will not result in a significant economic impact on a substantial number of small entities.

International Trade Impact Assessment

The Trade Agreements Act of 1979 (Pub. L. 96–39), as amended by the Uruguay Round Agreements Act (Pub. L. 103–465), prohibits Federal agencies from establishing standards or engaging in related activities that create unnecessary obstacles to the foreign commerce of the United States.

Pursuant to these Acts, the establishment of standards is not considered an unnecessary obstacle to the foreign commerce of the United States, so long as the standard has a legitimate domestic objective, such as the protection of safety, and does not operate in a manner that excludes imports that meet this objective. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards. The FAA has assessed the potential effect of this final rule and determined that it will improve safety and is consistent with the Trade Agreements Act.

Unfunded Mandates Assessment

Title II of the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4) requires each Federal agency to prepare a written statement assessing the effects of any Federal mandate in a proposed or final agency rule that may result in an expenditure of \$100 million or more (in 1995 dollars) in any one year by State, local, and tribal governments, in the aggregate, or by the private sector; such a mandate is deemed to be a “significant regulatory action.” The FAA currently uses an inflation-adjusted value of \$155 million in lieu of \$100 million. This final rule does not contain such a mandate; therefore, the requirements of Title II of the Act do not apply.

List of Subjects in 14 CFR Part 71

Airspace, Incorporation by reference, Navigation (air).

The Amendment

In consideration of the foregoing, the Federal Aviation Administration amends 14 CFR part 71 as follows:

PART 71--DESIGNATION OF CLASS A, B, C, D, AND E AIRSPACE AREAS; AIR TRAFFIC SERVICE ROUTES; AND REPORTING POINTS

1. The authority citation for part 71 continues to read as follows:

Authority: 49 U.S.C. 106 (f),106(g); 40103, 40113, 40120; E.O. 10854, 24 FR 9565, 3 CFR, 1959-1963 Comp., p. 389.

§ 71.1 [Amended]

2. The incorporation by reference in 14 CFR 71.1 of the FAA Order 7400.11B, Airspace Designations and Reporting Points, dated August 3, 2017, and effective September 15, 2017, is amended as follows:

Paragraph 3000 Subpart B--Class B Airspace.

* * * * *

AWP CA B San Francisco, CA

San Francisco International Airport (Primary Airport)

(lat. 37°37'08" N., long. 122°22'32" W.)

Boundaries.

Area A. That airspace extending upward from the surface to and including 10,000 feet MSL within the area bounded by a line beginning at lat. 37°41'40" N., long. 122°29'11" W.; to lat. 37°42'32" N., long. 122°28'07" W.; to lat. 37°43'08" N., long. 122°27'05" W.; to lat. 37°43'31" N., long. 122°26'10" W.; to lat. 37°43'52" N., long. 122°25'04" W.; to lat. 37°44'04" N., long. 122°24'05" W.; to lat. 37°44'10" N., long. 122°23'03" W.; to lat. 37°44'10" N., long. 122°21'53" W.; to lat. 37°44'03" N., long. 122°20'43" W.; to lat. 37°43'52" N., long. 122°19'49" W.; to lat. 37°43'37" N., long. 122°18'59" W.; to lat. 37°42'40" N., long. 122°16'43" W.; to lat. 37°40'21" N., long. 122°14'12" W.; to lat. 37°35'32" N., long. 122°14'06" W.; to lat. 37°33'53" N., long. 122°14'49" W.; to lat. 37°33'00" N., long. 122°15'24" W.; to lat. 37°33'39" N., long. 122°16'55" W.; to lat. 37°33'38" N., long. 122°17'48" W.; to lat. 37°32'57" N., long. 122°20'25" W.; to lat. 37°32'54" N., long. 122°22'20" W.; to lat. 37°33'08" N., long. 122°22'36" W.; to lat. 37°33'36" N., long. 122°22'58" W.; to lat. 37°33'56" N., long. 122°23'19" W.; to lat. 37°34'01" N., long. 122°23'34" W.; to lat. 37°34'17" N., long. 122°23'50" W.; to lat. 37°34'29" N., long. 122°24'01" W.; to lat. 37°35'00" N., long. 122°24'17" W.; to lat. 37°36'09" N., long. 122°25'36" W.; to lat. 37°36'22" N., long. 122°25'42" W.; to lat. 37°36'42" N., long. 122°25'34" W.; to lat. 37°38'26" N., long. 122°29'41" W.; to lat. 37°39'25" N., long. 122°29'41" W.; to lat. 37°40'32" N., long. 122°29'44" W.; to lat. 37°41'08" N., long. 122°29'46" W., thence to the point of beginning.

Area B. That airspace extending upward from 1,500 feet MSL to and including 10,000 feet MSL within the area bounded by a line beginning at lat. 37°35'32" N., long. 122°14'06" W.; to lat. 37°35'11" N., long. 122°11'13" W.; to lat. 37°32'49" N., long. 122°12'15" W.; to lat. 37°31'29" N., long. 122°13'08" W.; to lat. 37°33'00" N., long. 122°15'24" W.; to lat. 37°33'53" N., long. 122°14'49" W., thence to the point of beginning.

Area C. That airspace extending upward from 1,600 feet MSL to and including 10,000 feet MSL within the area bounded by a line beginning at lat. 37°41'25" N., long. 122°30'23" W.; to lat.

37°41'08" N., long. 122°29'46" W.; to lat. 37°40'32" N., long. 122°29'44" W.; to lat. 37°39'25" N., long. 122°29'41" W.; to lat. 37°40'04" N., long. 122°31'15" W., thence to the point of beginning.

Area D. That airspace extending upward from 2,100 feet MSL to and including 10,000 feet MSL within the area bounded by a line beginning at lat. 37°44'35" N., long. 122°35'53" W.; to lat. 37°41'40" N., long. 122°29'11" W.; to lat. 37°41'08" N., long. 122°29'46" W.; to lat. 37°40'32" N., long. 122°29'44" W.; to lat. 37°39'25" N., long. 122°29'41" W.; to lat. 37°38'42" N., long. 122°29'41" W.; to lat. 37°38'26" N., long. 122°29'41" W.; to lat. 37°39'19" N., long. 122°31'44" W.; to lat. 37°41'47" N., long. 122°37'40" W., thence to the point of beginning.

Area E. That airspace extending upward from 2,100 feet MSL to and including 10,000 feet MSL within the area bounded by a line beginning at lat. 37°44'15" N., long. 122°28'11" W.; to lat. 37°47'12" N., long. 122°18'31" W.; to lat. 37°45'33" N., long. 122°14'38" W.; to lat. 37°44'42" N., long. 122°15'13" W.; to lat. 37°42'17" N., long. 122°11'39" W.; to lat. 37°39'53" N., long. 122°11'31" W.; to lat. 37°35'11" N., long. 122°11'13" W.; to lat. 37°35'32" N., long. 122°14'06" W.; to lat. 37°40'21" N., long. 122°14'12" W.; to lat. 37°42'40" N., long. 122°16'43" W.; to lat. 37°43'37" N., long. 122°18'59" W.; to lat. 37°43'52" N., long. 122°19'49" W.; to lat. 37°44'03" N., long. 122°20'43" W.; to lat. 37°44'10" N., long. 122°21'53" W.; to lat. 37°44'10" N., long. 122°23'03" W.; to lat. 37°44'04" N., long. 122°24'05" W.; to lat. 37°43'52" N., long. 122°25'04" W.; to lat. 37°43'31" N., long. 122°26'10" W.; to lat. 37°43'08" N., long. 122°27'05" W.; to lat. 37°42'32" N., long. 122°28'07" W., thence to the point of beginning.

Area F. That airspace extending upward from 2,300 feet MSL to and including 10,000 feet MSL within the area bounded by a line beginning at lat. 37°35'11" N., long. 122°11'13" W.; to lat. 37°34'12" N., long. 122°08'08" W.; to lat. 37°32'01" N., long. 122°09'06" W.; to lat. 37°29'30" N., long. 122°08'21" W.; to lat. 37°29'02" N., long. 122°11'17" W.; to lat. 37°30'53" N., long. 122°14'38" W.; to lat. 37°33'38" N., long. 122°17'48" W.; to lat. 37°33'39" N., long. 122°16'55" W.; to lat. 37°33'00" N., long. 122°15'24" W.; to lat. 37°31'29" N., long. 122°13'08" W.; to lat. 37°32'49" N., long. 122°12'15" W., thence to the point of beginning.

Area G. That airspace extending upward from 3,000 feet MSL to and including 10,000 feet MSL within the area bounded by a line beginning at lat. 37°50'22" N., long. 122°41'07" W.; to lat. 37°47'11" N., long. 122°36'40" W.; to lat. 37°51'35" N., long. 122°29'32" W.; to lat. 37°51'03" N., long. 122°20'24" W.; to lat. 37°47'58" N., long. 122°13'04" W.; to lat. 37°45'33" N., long. 122°14'38" W.; to lat. 37°47'12" N., long. 122°18'31" W.; to lat. 37°44'15" N., long. 122°28'11" W.; to lat. 37°42'32" N., long. 122°28'07" W.; to lat. 37°41'40" N., long. 122°29'11" W.; to lat. 37°44'35" N., long. 122°35'53" W.; to lat. 37°41'47" N., long. 122°37'40" W.; to lat. 37°39'19" N., long. 122°31'44" W.; to lat. 37°38'26" N., long. 122°29'41" W.; to lat. 37°36'42" N., long. 122°25'34" W.; to lat. 37°36'22" N., long. 122°25'42" W.; to lat. 37°36'09" N., long. 122°25'36" W.; to lat. 37°35'00" N., long. 122°24'17" W.; to lat. 37°34'29" N., long. 122°24'01" W.; to lat. 37°34'17" N., long. 122°23'50" W.; to lat. 37°40'37" N., long. 122°39'05" W.; to lat. 37°46'40" N., long. 122°47'13" W., thence to the point of beginning.

Area H. That airspace extending upward from 3,000 feet MSL to and including 10,000 feet MSL within the area bounded by a line beginning at lat. 37°39'53" N., long. 122°11'31" W.; to lat. 37°34'50" N., long. 122°03'58" W.; to lat. 37°30'24" N., long. 122°05'54" W.; to lat. 37°27'10" N., long. 122°07'39" W.; to lat. 37°26'26" N., long. 122°10'38" W.; to lat. 37°28'39" N., long. 122°13'10" W.; to lat. 37°32'19" N., long. 122°21'54" W.; to lat. 37°32'54" N., long. 122°22'20" W.; to lat. 37°32'57" N., long. 122°20'25" W.; to lat. 37°33'38" N., long. 122°17'48" W.; to lat. 37°30'53" N., long. 122°14'38" W.; to lat. 37°29'02" N., long. 122°11'17" W.; to lat. 37°29'30" N., long. 122°08'21" W.; to lat. 37°32'01" N., long. 122°09'06" W.; to lat. 37°34'12" N., long. 122°08'08" W.; to lat. 37°35'11" N., long. 122°11'13" W., thence to the point of beginning.

Area I. That airspace extending upward from 4,000 feet MSL to and including 10,000 feet MSL within the area bounded by a line beginning at lat. 37°55'31" N., long. 122°23'04" W.; to lat. 37°53'11" N., long. 122°09'28" W.; to lat. 37°41'50" N., long. 121°57'39" W.; to lat. 37°32'33" N., long. 121°55'58" W.; to lat. 37°28'19" N., long. 121°57'49" W.; to lat. 37°22'19" N., long. 122°05'04" W.; to lat. 37°20'04" N., long. 122°07'47" W.; to lat. 37°22'58" N., long. 122°19'36" W.; to lat. 37°29'37" N., long. 122°27'17" W.; to lat. 37°39'32" N., long. 122°51'17" W.; to lat. 37°44'03" N., long. 122°51'30" W.; to lat. 37°46'40" N., long. 122°47'13" W.; to lat. 37°40'37" N., long. 122°39'05" W.; to lat. 37°34'17" N., long. 122°23'50" W.; to lat. 37°34'01" N., long. 122°23'34" W.; to lat. 37°33'56" N., long. 122°23'19" W.; to lat. 37°33'36" N., long. 122°22'58" W.; to lat. 37°33'08" N., long. 122°22'36" W.; to lat. 37°32'54" N., long. 122°22'20" W.; to lat. 37°32'19" N., long. 122°21'54" W.; to lat. 37°28'39" N., long. 122°13'10" W.; to lat. 37°26'26" N., long. 122°10'38" W.; to lat. 37°27'10" N., long. 122°07'39" W.; to lat. 37°30'24" N., long. 122°05'54" W.; to lat. 37°34'50" N., long. 122°03'58" W.; to lat. 37°39'53" N., long. 122°11'31" W.; to lat. 37°42'17" N., long. 122°11'39" W.; to lat. 37°44'42" N., long. 122°15'13" W.; to lat. 37°45'33" N., long. 122°14'38" W.; to lat. 37°47'58" N., long. 122°13'04" W.; to lat. 37°51'03" N., long. 122°20'24" W.; to lat. 37°51'35" N., long. 122°29'32" W., thence to the point of beginning.

Area J. That airspace extending upward from 5,000 feet MSL to and including 10,000 feet MSL within the area bounded by a line beginning at lat. 38°00'00" N., long. 122°25'00" W.; to lat. 37°58'50" N., long. 122°05'45" W.; to lat. 37°53'11" N., long. 122°09'28" W.; to lat. 37°55'31" N., long. 122°23'04" W.; to lat. 37°51'35" N., long. 122°29'32" W.; to lat. 37°47'11" N., long. 122°36'40" W.; to lat. 37°50'22" N., long. 122°41'07" W., thence to the point of beginning.

Area K. That airspace extending upward from 6,000 feet MSL to and including 10,000 feet MSL within the area bounded by a line beginning at lat. 37°58'50" N., long. 122°05'45" W.; to lat. 37°54'06" N., long. 121°59'12" W.; to lat. 37°51'17" N., long. 121°58'51" W.; to lat. 37°53'11" N., long. 122°09'28" W.; thence to the point of beginning.

Area L. That airspace extending upward from 5,000 feet MSL to and including 10,000 feet MSL within the area bounded by a line beginning at lat. 37°53'11" N., long. 122°09'28" W.; to lat. 37°51'17" N., long. 121°58'51" W.; to lat. 37°41'50" N., long. 121°57'39" W.; thence to the point of beginning.

Area M. That airspace extending upward from 6,000 feet MSL to and including 10,000 feet MSL within the area bounded by a line beginning at lat. 37°39'32" N., long. 122°51'17" W.; to

lat. 37°29'37" N., long. 122°27'17" W.; to lat. 37°22'58" N., long. 122°19'36" W. to lat. 37°20'04" N., long. 122°07'47" W.; to lat. 37°22'19" N., long. 122°05'04" W.; to lat. 37°28'19" N., long. 121°57'49" W.; to lat. 37°32'33" N., long. 121°55'58" W.; to lat. 37°32'27" N., long. 121°53'05" W.; to lat. 37°32'54" N., long. 121°51'09" W.; to lat. 37°28'25" N., long. 121°49'25" W.; to lat. 37°24'12" N., long. 121°55'56" W. to lat. 37°19'04" N., long. 122°03'49" W.; to lat. 37°10'36" N., long. 122°00'30" W.; to lat. 37°15'08" N., long. 122°24'54" W.; to lat. 37°15'04" N., long. 122°24'55" W.; to lat. 37°15'03" N., long. 122°25'01" W.; to lat. 37°14'54" N., long. 122°25'07" W.; to lat. 37°14'39" N., long. 122°25'00" W.; to lat. 37°14'29" N., long. 122°25'03" W.; to lat. 37°14'01" N., long. 122°24'53" W.; to lat. 37°13'34" N., long. 122°24'30" W.; to lat. 37°13'18" N., long. 122°24'26" W.; to lat. 37°13'02" N., long. 122°24'31" W.; to lat. 37°12'01" N., long. 122°24'30" W.; to lat. 37°11'24" N., long. 122°23'57" W.; to lat. 37°11'10" N., long. 122°23'54" W.; to lat. 37°11'01" N., long. 122°23'38" W.; to lat. 37°11'03" N., long. 122°23'27" W.; to lat. 37°10'59" N., long. 122°22'55" W.; to lat. 37°10'45" N., long. 122°22'39" W.; to lat. 37°10'34" N., long. 122°22'20" W.; to lat. 37°10'25" N., long. 122°22'09" W.; to lat. 37°10'11" N., long. 122°21'57" W.; to lat. 37°15'22" N., long. 122°50'17" W., thence to the point of beginning.

Area N. That airspace extending upward from 8,000 feet MSL to and including 10,000 feet MSL within the area bounded by a line beginning at lat. 37°10'36" N., long. 122°00'30" W.; to lat. 37°15'08" N., long. 122°24'54" W.; to lat. 37°15'04" N., long. 122°24'55" W.; to lat. 37°15'03" N., long. 122°25'01" W.; to lat. 37°14'54" N., long. 122°25'07" W.; to lat. 37°14'39" N., long. 122°25'00" W.; to lat. 37°14'29" N., long. 122°25'03" W.; to lat. 37°14'01" N., long. 122°24'53" W.; to lat. 37°13'34" N., long. 122°24'30" W.; to lat. 37°13'18" N., long. 122°24'26" W.; to lat. 37°13'02" N., long. 122°24'31" W.; to lat. 37°12'01" N., long. 122°24'30" W.; to lat. 37°11'24" N., long. 122°23'57" W.; to lat. 37°11'10" N., long. 122°23'54" W.; to lat. 37°11'01" N., long. 122°23'38" W.; to lat. 37°11'03" N., long. 122°23'27" W.; to lat. 37°10'59" N., long. 122°22'55" W.; to lat. 37°10'45" N., long. 122°22'39" W.; to lat. 37°10'34" N., long. 122°22'20" W.; to lat. 37°10'25" N., long. 122°22'09" W.; to lat. 37°10'11" N., long. 122°21'57" W.; to lat. 37°05'50" N., long. 121°58'38" W., thence to the point of beginning.

Area O. That airspace extending upward from 7,000 feet MSL to and including 10,000 feet MSL within the area bounded by a line beginning at to lat. 37°54'06" N., long. 121°59'12" W.; to lat. 37°51'25" N., long. 121°55'58" W.; to lat. 37°42'02" N., long. 121°51'17" W.; to lat. 37°41'50" N., long. 121°57'39" W.; to lat. 37°51'17" N., long. 121°58'51" W., thence to the point of beginning.

Area P. That airspace extending upward from 7,000 feet MSL to and including 10,000 feet MSL within the area bounded by a line beginning at lat. 37°32'54" N., long. 121°51'09" W.; to lat. 37°33'53" N., long. 121°46'49" W.; to lat. 37°29'10" N., long. 121°45'04" W.; to lat. 37°26'32" N., long. 121°45'50" W.; to lat. 37°22'31" N., long. 121°52'05" W.; to lat. 37°24'12" N., long. 121°55'56" W.; to lat. 37°28'25" N., long. 121°49'25" W., thence to the point of beginning.

Area Q. That airspace extending upward from 8,000 feet MSL to and including 10,000 feet MSL within the area bounded by a line beginning at lat. 37°41'50" N., long. 121°57'39" W.; to lat. 37°42'02" N., long. 121°51'17" W.; to lat. 37°35'02" N., long. 121°37'45" W.; to lat. 37°31'02" N., long. 121°37'11" W.; to lat. 37°23'32" N., long. 121°42'43" W.; to lat. 37°22'31" N., long.

121°52'05" W.; to lat. 37°26'32" N., long. 121°45'50" W.; to lat. 37°29'10" N., long. 121°45'04" W.; to lat. 37°33'53" N., long. 121°46'49" W.; to lat. 37°32'27" N., long. 121°53'05" W.; to lat. 37°32'33" N., long. 121°55'58" W., thence to the point of beginning.

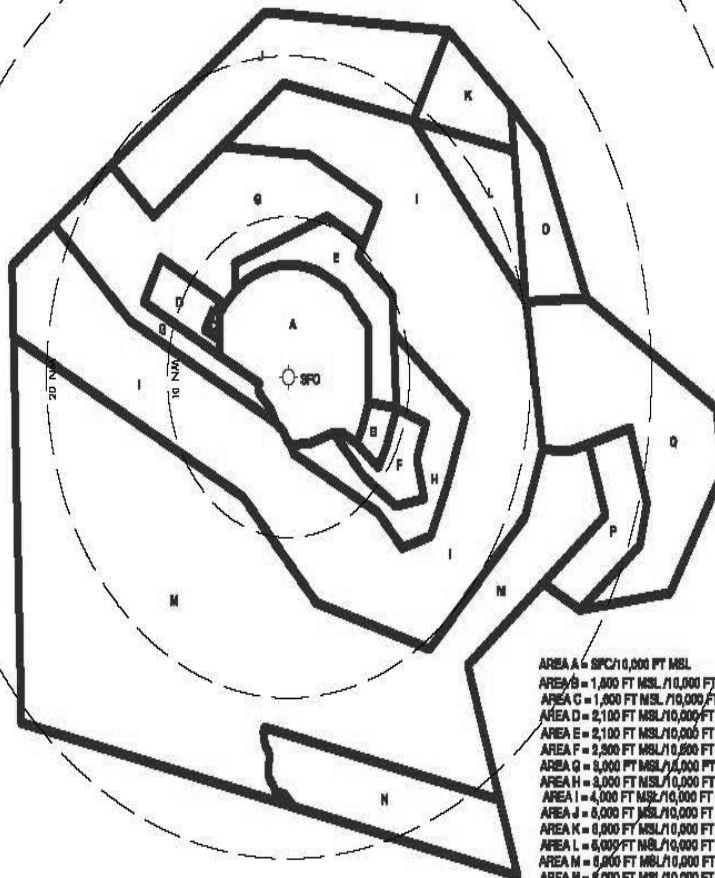
Issued in Washington, DC, on May 30, 2018.

Rodger A. Dean Jr.,
Manager, Airspace Policy Group.

17-AWA-02
 SAN FRANCISCO CLASS B, CA
 SAN FRANCISCO TAC
 1:250,000

38 15 00N

121 15 00W



AREA A = 800 FT / 10,000 FT MSL
 AREA B = 1,000 FT MSL / 10,000 FT MSL
 AREA C = 1,000 FT MSL / 10,000 FT MSL
 AREA D = 2,100 FT MSL / 10,000 FT MSL
 AREA E = 2,100 FT MSL / 10,000 FT MSL
 AREA F = 2,300 FT MSL / 10,000 FT MSL
 AREA G = 2,300 FT MSL / 10,000 FT MSL
 AREA H = 2,300 FT MSL / 10,000 FT MSL
 AREA I = 4,000 FT MSL / 10,000 FT MSL
 AREA J = 4,000 FT MSL / 10,000 FT MSL
 AREA K = 4,000 FT MSL / 10,000 FT MSL
 AREA L = 4,000 FT MSL / 10,000 FT MSL
 AREA M = 4,000 FT MSL / 10,000 FT MSL
 AREA N = 4,000 FT MSL / 10,000 FT MSL
 AREA O = 4,000 FT MSL / 10,000 FT MSL
 AREA P = 4,000 FT MSL / 10,000 FT MSL
 AREA Q = 4,000 FT MSL / 10,000 FT MSL

FOR INFORMATION ONLY; NOT FOR NAVIGATION

36 45 00N

123 15 00W

